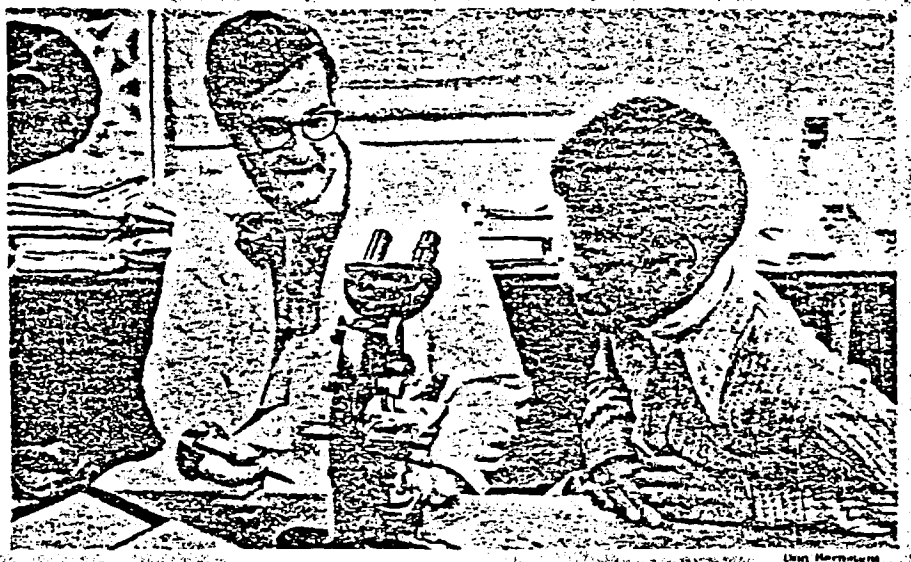
EDUCATION

Bucking the System

An outwardly calm medical researcher from Boston walked to the dais of a conference room in a Philadelphia motel one morning last month to discuss "The Effect of Experimental Irradiation on the Anti-Bacterial Defense System of the Lung." His audience was 40 members of the American Federation for Clinical Research. His name was Hunter Nicholas and, at 18, the black researcher from Boston was the first pre-college student ever to present an original paper to the group. Recently, NEWSWEEK's Contributing Editor Joseph Morgenstern interviewed Nicholas and the Boston doctor who started him on his medical research. Morgenstern's report:



Doctor Huber and Hunter Nicholas: Quiet affection and mutual respect

Nicholas is the finest and youngest flower so far of an informal program that was started three years ago at Boston City Hospital by Dr. Gary Huber, chief of Harvard University's pulmonary unit at the hospital's Channing Laboratory for Infectious Diseases. Huber's program doesn't even have a name, let alone a fancy acronym, but its purpose is to expose interested young people to medical procedures and give them positions of genuine responsibility in a research laboratory. The program has no funding and seeks none. It also lacks entrance exams and admission criteria. Huber, as a one-man screening board, looks for motivation, not academic credentials, in the dozen or more teen-agers who volunteer for work in his laboratory each year. "We underestimate what young minds can do," he says. His own motivation is a belief that the fifteen-year grind of conventional medical education can do terrible things to a student's head. "It's a crazy way to train people. You usually put them into a lock step of learning by rote during what ought to be their most creative period."

Hunter Nicholas has never learned the lock step, even though his elementary education was in the same Roxbury ghetto school that Jonathan Kozol made infamous in "Death at an Early Age." When he was 13, his parents realized the inadequacy of his education (his father, a college graduate, is a social worker) and had him bused out of the ghetto to Marblehead High School. He also went to supplementary classes sponsored by his church and the local Boys' Club. At 15, he volunteered for after-school work at a private hospital in Roxbury. "I was the only volunteer there," he recalls, "and I ran around a lot, delivering things. I've always been interested in medicine, whether or not the ambition was clearly formed in my mind. I don't know how it started. It must have been inbred."

Later the same year, Nicholas went looking for more challenging volunteer work at a larger hospital. Boston City sent him to Huber, who had just begun his program for young people in Channing Lab. Huber inflicted a fair amount of scut work on the boy—washing dishes, fetching books and journals from the library—but he also offered work that Nicholas could respect. At 4 a.m. each morning Nicholas came in and injected mice for an experiment the laboratory was running. Huber gave him some medical literature to read for himself, taught him the basics of tissue preparation, assigned him as an assistant to a lab technician and helped him pick a research project of his own.

Elected: None of this went as easily as it sounds, of course. Nicholas needed help in reading and understanding medical terminology. Huber and his lab associates arranged for his enrollment at the Palfrey Street School, a private school in Watertown that counts Robert Kennedy Jr. as one of its students. Palfrey Street took care of his tuition and gave him special tutoring in English and math. Within two years Nicholas had been unanimously elected to the school's board of trustees and was teaching classes in freshman algebra and black literature.

After graduating from Palfrey Street last June, Nicholas delayed his entrance into college, partly in order to finish his research project, an inquiry into the question of why patients undergoing radiation therapy often develop severe and sometimes fatal lung infections. His project was a modest one, carefully delimited in its scope and speculations. It sought to quantify the loss of resistance to infection, rather than to speculate on the ultimate mechanisms of that loss. But any researcher, let alone an 18-year-old, could take professional pride in the work, which involved histology, the use of laboratory animals, statistics, X-rays and radio-labeled bacteria.

When the Boston newspapers learned from a hospital press release that Nicholas was going to present his paper in Philadelphia last month, they dreamed up a familiar kind of hero—the "illiterate ghetto youth pulls himself up from the gutter" cliché. None of the stories even mentioned Nicholas's middle-class background or the intellectual ambitions and traditions of his family. SWEEPER MAKES GOOD, one headline read, even though Nicholas has never, to anyone's certain knowledge, had a broom in his hand. The subject of this nonsense is understandably distressed about it. "The press wasn't interested in my accomplishment," he says. "They were too busy with that stereotype of starting as nothing and then having risen. You know, the rich millionaire who started by shining shoes. That's crap. But, the stereotype says that when you're a black man in the United States you've got to start at the bottom."

Credit: Nicholas and his mentor, Gary Huber, have affection and respect for each other. Huber gives credit where it's due, sometimes to himself and his colleagues for helping Nicholas, more often to Nicholas for the quality and originality of his work. And Nicholas is eager to give credit to Huber's program. "This is really revolutionary, you know, it's really going against the system." And so it is. The system dictates that a medical student do intellectual drudgery for at least eight years, that he delay the beginning of his practice until he's in his mid-30s and overschooled, underexperienced, often exhausted and sometimes only five or so years away from his first heart attack.

The most revolutionary of Huber's notions is that high-school students can do useful, original research, even though their over-all knowledge of medicine may be limited. He feels that Nicholas probably knows more about the effects of radiation on lung tissue than 97 per cent of the doctors in the world. "Getting to be really knowledgeable about a specific aspect of research may involve reading and digesting 50 or so papers. That's a finite number. It can be done. Research isn't all that special," Huber insists. "You don't need the education. You just need to know how to think."

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